

4.7 AESTHETICS/LIGHT AND GLARE

Project impacts on the aesthetic character of the site from grading activities and building construction are analyzed and evaluated in relation to existing and surrounding site conditions. Consideration of public scenic views, introduction of new sources of light and glare, and compatibility of the proposed project with adjacent local aesthetic resources are included in this section. Construction-related impacts are addressed in Section 4.9, Construction-Related Impacts. As the proposed off-site pipelines and underground pump station would be subsurface, there are no anticipated long-term aesthetic impacts. Short-term impacts to natural vegetation would be mitigated through restoration as provided for in Section 4.9. Operation of the proposed facility under stand-alone conditions would not alter the impacts which are analyzed based on the proposed facility operating as a co-located facility. Thus, the following description and analysis is applicable for both scenarios.

EXISTING CONDITIONS

AESTHETICS

On Site

The existing site's aesthetic quality can be characterized as low to non-existent, as existing views on site are dominated by the industrial fuel oil storage tank area formerly used in conjunction with the AES Huntington Beach Generating Station (HBGS). The approximately 13-acre industrial site is currently developed with three fuel storage tanks. These on-site fuel oil storage tanks are 205 feet in diameter and 40 feet in height. The exterior shell of all three tanks is composed of a non-reflective metal surface. Containment berms of approximately 10 to 15 feet in height surround the perimeter of each tank. The site is fully developed, with no sensitive vegetation communities or other visual resources (refer to Figure 3-2, Site Vicinity Map, and Figure 4.7-1, Desalination Facility Site Photographs).

Off Site

Views of the HBGS are available from numerous areas surrounding the project site, including the following: easterly views from the Huntington-By-The-Sea Mobile Home Park located west of the project site, southeasterly views from Beach Boulevard located northwest of the project site, southerly views from limited locations along Hamilton Avenue bordering the project site to the north, northwesterly and northeasterly views from limited locations along Huntington State and Huntington City beaches, and northwesterly views from the vicinity of the Magnolia Street and Pacific Coast Highway intersection. However, since the proposed project is located behind the main HBGS structures and surrounded by 10- by 15-foot-high earthen berms, views of the project from the surrounding area are limited. Surrounding adjacent land uses include the HBGS to the south, the Orange County Flood Control District (OCFCD) flood channel to the east, a City of Huntington Beach (City) maintenance yard to the north, and an electrical switchyard to the west of the desalination facility site. Additional surrounding land uses include Pacific Coast Highway to the south; the Pacific Holdings storage tank facility and Magnolia Marsh to the southeast; Ascon/Nesi Landfill to the east; commercial, industrial, recreational, and residential uses farther north, and Newland Street, Huntington-By-The-Sea Mobile Home Park, and Cabrillo Mobile Home Park to the west (refer to Figure 4.7-1). The Pacific Ocean, Huntington State Beach, and Huntington City Beach are located south of the subject site and are considered sensitive visual resources of significant aesthetic value. Uses surrounding the proposed pipeline routes and underground pump stations vary depending upon

the location, although uses generally consist of residential with some open space, commercial, school, recreational, and medical (Fairview State Hospital in the City of Costa Mesa) uses (refer to Figure 4.7-2, Pipeline Alignment Photographs, and Figure 4.7-3, Booster Pump Station Site Photographs).

LIGHT AND GLARE

On Site

The current uses on site produce minimal light and glare due to the lack of high-intensity lighting and absence of reflective surfaces on existing facilities. A minimal amount of nighttime lighting currently exists on site for security purposes. Lighting fixtures are located sporadically throughout the project site, on poles and mounted on the existing storage tanks.

Off Site

Existing off-site sources of light and glare surrounding the project site, proposed pipeline alignments, proposed new underground pump station sites, and modified existing pump station site, include street lighting, automobile headlights, and nighttime security lighting. Facility lighting and nighttime security lighting are utilized at the Edison Community Center and Edison High School situated northeast of the project site, while Beach Boulevard (a major arterial located west of the project site) produces light and glare as a result of heavy automobile traffic and street lighting.

IMPACTS

Significance thresholds in this section are based on the CEQA Appendix G Environmental Checklist Form (14 CCR 15000 et seq.) and are described below.

SIGNIFICANCE CRITERIA

A potentially significant impact to aesthetics would occur if project implementation caused one or more of the following to occur:

- Have a substantial adverse affect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- Substantially degrade the existing visual character or quality of the site and its surroundings
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The significance of an aesthetic impact, in terms of this project, can be determined by examining anticipated project effects from a number of different vantage points, including construction-related visual disruption, observer position, and changes to the existing visual character of the area.

For a discussion of short-term, construction-related aesthetic impacts, refer to Section 4.9.



A View of the desalination facility site in a northeasterly direction from the HBGS.



B A southerly view of the desalination facility site from the northwestern corner of the site.



C View of the HBGS (situated southwest of the subject site) in an easterly direction from Newland Street.



D A westerly view of the desalination facility site across the Huntington Beach Channel.



E A westerly view of the above ground product water storage tank portion of the project site.

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A An easterly view of Hamilton Avenue, near the intersection of Hamilton Avenue and Magnolia Street (Primary and Alternative Alignment).



B A southerly view of Magnolia Street, between Hamilton Avenue and Adams Avenue.



C An easterly view of the Primary Alignment at the Costa Mesa Country Club.



D View of Victoria Street in a westerly direction, near the intersection of Victoria Street and Monrovia Avenue (Alternative Alignment).



E A northeasterly view of the Elden Avenue/Del Mar Avenue intersection, the point at which both alignment alternatives will connect to the OC-44 line in the City of Costa Mesa.

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A A northwesterly view of the proposed booster pump station within an unincorporated area of the County of Orange (OC-44 pump station).

B A northerly view of an access road and existing pum station facilities located adjacent to the OC-44 pump station site.



C View of the Coastal Junction pump station site, located within the parking lot of St. Paul's Greek Orthodox Church.

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VISUAL CHARACTER

Background

The project site is industrial in nature and exists as part of a fuel-oil storage tank facility formerly used in conjunction with the AES HBGS. Prominent industrial facilities within the vicinity include the HBGS and the Pacific Holdings storage tank facility. The existing project site maintains minimal to non-existent sensitive visual resources and has no substantial aesthetic value, as the existing fuel storage tanks are as large as 40 feet in height and 205 feet in diameter and lack aesthetic or architectural enhancements. Currently, no intervening aesthetic screening exists around the proposed project site, leaving the on-site fuel storage tanks fully exposed to view from surrounding pedestrians, motorists, and viewers from surrounding land uses. Pacific Coast Highway is identified in the City's General Plan as being a Major Urban Scenic Corridor, and is eligible for Scenic Highway listing, but is not officially listed. Newland Street is designated as a Landscape Corridor from Pacific Coast Highway to Hamilton Avenue. The General Plan states as a goal for scenic roadways that view corridors and landscaping/design treatments should be enhanced along these roadways.

The project would improve the aesthetic character of the site vicinity by replacing the existing dilapidated storage tanks with multiple buildings/structures featuring contemporary architectural design features and significant improvements in landscaping, streetscape and aesthetic screening techniques designed to minimize potential impacts of the project on the surrounding community. Visual simulations of the proposed project are provided in Figure 4.7-4, Desalination Facility Visual Simulation – Aerial View, Figure 4.7-5, Desalination Facility Visual Simulation – Magnolia Street, and Figure 4.7-6, Desalination Facility Visual Simulation – Newland Street. Although the proposed aboveground product water storage tank (which would be approximately 250 feet in diameter with a maximum height of 30 feet) would add to the aesthetic impact of the proposed project in regards to surrounding uses and local roadways, the tank would be constructed of non-reflective materials. When considering that the tank (30 feet high above grade) would replace a dilapidated fuel oil storage tank (40 feet high) with a product water tank featuring contemporary design features, aesthetic screening, and landscaping, impacts would be less than significant, as the on-site visual alteration would be considered a visual upgrade, albeit minimal. In addition, as the proposed off-site pipelines and new underground pump stations would be subsurface, with only minor surface improvements to provide for access. There are no anticipated long-term aesthetic impacts associated with these improvements. Modifications to the existing OC-35 pump station would occur within the pump station site itself, behind a 6-foot wall, and would not be visible from the exterior.

Landscaping improvements would be focused primarily on the eastern, western, and northern portions of the subject site (refer to Figure 3-16, Conceptual Landscape Master Plan). Landscaping selection would match that of the existing HBGS perimeter. Landscaping within the northern portion of the subject site would consist of cajuput tree (*Melaleuca quinquenervia*), lehman's mallee (*Eucalyptus lehmannii*), weeping bottle brush tree (*Callistemon viminalis*), turf, and ornamental drought/salt tolerant shrub and ground cover. Additional landscaping within the eastern portion of the project site would consist of a native wetlands planting area, situated east of the administrative building. Landscaping is also proposed along the western boundary of the product water tank site, along Newland Street, including intervening mature trees that would provide natural vegetative screening of the facility and enhance the visual character of the site. Vegetation would include evergreen street trees, accent palm trees, and shrub/groundcover plantings. The project would

adhere to all City requirements with regard to building heights, landscaping, lighting, setbacks, and lot coverage.

Significance of Impacts

The project would not have a substantial adverse affect on a scenic vista, because as noted in the existing conditions and impact background discussion, the site is currently industrial in nature, containing large scale industrial tank facilities. The views of the site and views of scenic resources through the site would not be degraded or impaired because the proposed facilities are less visually obtrusive than the existing fuel oil storage tanks. Therefore the project's impacts on scenic vistas are less than significant.

As noted, the site currently contains industrial facilities, and no scenic resources, trees, rock outcroppings, or historic buildings are located on the site. Although Pacific Coast Highway is identified as being eligible for state scenic highway status, it is not so designated. In the event Pacific Coast Highway were to be designated in the future as a scenic highway, impacts would be less than significant as there are no mature trees, rock outcroppings, community identification symbols, or landmarks that would be impacted due to project implementation. The project site is currently industrial in nature and proposed facilities would generally be less visually obtrusive than the existing fuel storage tanks. Therefore, the project would not have a significant effect on scenic visual resources or historical natural resources.

Project components would not exceed 35 feet in height and would replace existing structures that are up to 40 feet in height. Project components would be set back from Newland Street and Edison Avenue and separated from the street by landscaping and streetscape improvements. Due to the presence of surrounding roadways, including Newland Street and Edison Avenue, the project is not likely to substantially increase shade or cast shadows on surrounding public spaces. Some mid-day shadows may be casted to the west towards Newland Street; however, this area is generally separated from existing uses by the roadway and vacant lands. The project will result in a decrease in shading as the proposed structures would not exceed 30 feet in height in comparison to the existing structures, which are 40 feet in height. Therefore, potential impacts as a result of increased shade or shadow are not anticipated.

The project would generally improve visual conditions on the project site and would not substantially degrade the existing visual character or quality of the site and its surroundings. However, design features have been identified that will provide assurances that the visual character of the site is maintained and enhanced per the design requirements of the City of Huntington Beach. Although impacts are less than significant, design standards would be implemented through the City's design review process, and a mitigation measure (ALG-1) has been added to address visual screening that will be required through that process.



Existing Aerial View



Proposed Aerial View

View 1 – Aerial View of the Proposed Site

SOURCE: Poseidon Resources Corporation 2010

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Seawater Desalination Project At Huntington Beach

**FIGURE 4.7-4
Desalination Facility Visual Simulation – Aerial View**

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View 2 – From Magnolia Street looking north toward the Proposed Site

Note: This visual simulation utilizes computer technology (CADD/digital photo simulation) to translate the 2-dimensional engineering plans and landscape concepts into a composite 3-dimensional image, so as to depict the conceptual overall appearance of the project from off-site locations. The details depicted in this simulation are based on current architectural and landscape architectural plans. The purpose of this simulation is to evaluate grading concepts and character, terracing, juxtaposition of building heights, and softening of building massing with landscape. It is recognized that design details, materials, and colors shown in these exhibits are conceptual and subject to preparation of final engineering and construction documents.

SOURCE: Poseidon Resources Corporation 2010

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MAY 2010

Seawater Desalination Project At Huntington Beach

**FIGURE 4.7-5
Desalination Facility Visual Simulation – Magnolia Street**

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Note: This visual simulation utilizes computer technology (CADD/digital photo simulation) to translate the 2-dimensional engineering plans and landscape concepts into a composite 3-dimensional image, so as to depict the conceptual overall appearance of the project from off-site locations. The details depicted in this simulation are based on current architectural and landscape architectural plans. The purpose of this simulation is to evaluate grading concepts and character, terracing, juxtaposition of building heights, and softening of building massing with landscape. It is recognized that design details, materials, and colors shown in these exhibits are conceptual and subject to preparation of final engineering and construction documents.

View 3 – From Newland Overpass looking south toward the Proposed Site

SOURCE: Poseidon Resources Corporation 2010

**FIGURE 4.7-6
Desalination Facility Visual Simulation – Newland Street**

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LIGHT AND GLARE

The project components are located in an urbanized area that includes existing light sources. Night lighting sources in the area include sporadic light fixtures mounted on poles and on the existing fuel storage tanks, residential lighting associated with the mobile home park to the west, security lighting at the substation located to the south of and the HBGS facility. In addition, the site is void of reflective surfaces capable of producing significant amounts of glare. The project would result in the removal of existing light sources (light fixtures mounted on poles and on the existing fuel storage tanks) and introduce new light sources for the operational use of the desalination facility, 66 kV substation and product water storage tank.

Any new lighting would be subject to City design standards and would utilize directional lighting techniques and low-wattage bulbs (without compromising site safety or security) in order to direct light downwards and minimize light spillover into adjacent land uses, such as the mobile home park located to the west, and wetland areas to the southeast. Given the existing industrial nature of the area, the amount of lighting would not substantially increase compared to the existing condition for nearby sensitive receptors.

Project implementation and vehicles utilizing the facility may also result in a minimal amount of additional reflective surfaces on proposed structures. However, the resulting glare effects would be relatively minor when compared to existing levels of glare in the site vicinity.

Water transmission pipeline facilities would also be constructed adjacent to residential uses within the right-of-way as discussed in Section 3. Additional lighting or glare-inducing surfaces would not occur as a result of water transmission pipeline or underground booster pump stations, or modified existing pump station implementation, as both the pipeline alignment and underground pump station would occur underground. Therefore these improvements would not create a new source of substantial light or glare that would potentially impact day or nighttime views.

As discussed above, the project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Although this impact is less than significant, design standards would be implemented through the City's design review process, and a mitigation measure (ALG-2) has been added to address lighting standards that will be required through that process.

SUMMARY OF IMPACTS

Although no impacts related to aesthetics, light and glare have been identified, mitigation measures are proposed to ensure (a) the visual character of the site is maintained and enhanced per the design requirements of the City of Huntington Beach and (b) design standards would be implemented through the City's design review process to minimize light and glare.

MITIGATION MEASURES

VISUAL CHARACTER

- ALG-1** The applicant shall submit full design details pursuant to City of Huntington Beach requirements for design review submittals that will specify architectural treatments that minimize visual impacts. The design shall specify the following:

- For areas visible from adjacent, existing, or proposed residential areas, exterior mechanical equipment shall be screened from view on all sides, and rooftop mechanical equipment shall be set back 15 feet from the exterior edges of the building.
- Equipment to be screened includes, but is not limited to, heating, air conditioning, refrigeration equipment, plumbing lines, duct-work, and transformers.
- Said screening shall be architecturally compatible with the building in terms of materials and colors.
- If screening is not designed specifically into the building, a rooftop mechanical equipment plan showing screening must be submitted for review and approval with the application for building permit(s).

LIGHT AND GLARE

- ALG-2** The applicant shall submit a lighting plan to be reviewed and approved by the City. The plan shall:
- Specify that light intensity for outdoor lighting shall be limited to that necessary for adequate security and safety.
 - Demonstrate that outside lighting shall be directed to prevent spillage onto adjacent properties.

UNAVOIDABLE SIGNIFICANT IMPACTS

None have been identified.